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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,953	03/05/2002	Markus Beer	87361.3380	5350

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EXAMINER	
LAWRENCE JR, FRANK M	

ART UNIT	PAPER NUMBER
1724	

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/087,953	BEER ET AL.	
	Examiner	Art Unit	
	Frank M. Lawrence	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 September 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 13-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 13-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6-8 and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Braun et al. (5,656,368).

4. Braun et al. ('368) teach a pleated fibrous filtration face mask comprising at least two layers that are point-bonded using ultrasonic or thermal welding in a grid pattern that makes up 0.5-15% of the filter surface (see figures 1, 2, 4, 12, col. 7, lines 20-43). The layers are welded between a horn and anvil of an ultrasonic welding apparatus with the second layer 21 facing the horn (see figure 7, col. 14, line 49 to col. 15, line 12). The pleated layer 12 can be a non-woven polypropylene or similar polymeric material and has an average pore size of less than 150 microns with a preferred range of 15-100 microns (see col. 8, lines 28-31, col. 9, lines 1-25), and the second layer 16 can comprise polypropylene and be a woven or non-woven web (see col. 10, lines 7-14). Further, the second layer preferably does not hinder fluid flow through the filter and has a lower pressure drop and is not more restrictive to fluid flow than the first layer (col. 9. line

60 to col. 10, line 6). The second layer is inherently capable of particle filtration because it is a non-woven or woven web.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 5 and 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun et al. ('368) in view of Chapman (6,056,809).

7. Braun et al. ('368) disclose all of the limitations of the claim except that the woven filter fabric has a particle retention of 10-60 microns and that the first filter layer is the woven layer. Chapman ('809) discloses a multi-layer thermally-welded filter that comprises a woven polypropylene layer having a 10 micron porosity (col. 2, lines 27-57, col. 4, lines 45-67). It would have been obvious to one having ordinary skill in the art at the time of the invention to substitute a woven layer for the non-woven first filter layer of Braun et al. ('368) in order to provide a material having a high strength and particle filtering efficiency. It is submitted that the particle retention of each filter layer is a parameter that would have been routinely optimized by one having ordinary skill in the art at the time of the invention in order to provide any appropriate porosity based on the filtering application, taking into consideration contaminant size and the acceptable pressure drop across the filter. Where the first filter layer of Braun et al. ('368) is selected to have a porosity at the lower end of the preferred range of 15-100 microns,

the second layer would be selected to have a lower pressure drop, which can fall in a range of less than 10-60 microns.

Response to Arguments

8. Applicant's arguments filed September 2, 2003 have been fully considered but they are not persuasive. Applicant argues that the retaining layer of Braun et al. is not a filter layer, however it is submitted that the retaining layer is inherently capable of performing particle filtration because it is a woven or non-woven web as described in paragraph 4 above, and will have different filtration properties than the first filter layer because it is designed to not be more restrictive to fluid flow than the first filter layer. The recitation that the layer is a filter layer is considered an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).Applicant also argues that the Naltex layer in the McGaw patent is not a filter layer, however it is the examiner's position that the layer is inherently capable of filtration because it is a mesh sheet material. Because of the cancellation of claims 9-12, the McGaw reference is no longer relied on for teaching a method of manufacture. A new rejection using Chapman ('809) is submitted to address the new claims presented in the amendment.

9. The objections to the declaration and specification and the 35 USC 112 rejection have been withdrawn.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 703-305-0585. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 703-308-1261. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Frank M. Lawrence
Primary Examiner
Art Unit 1724

Frank Lawrence 10-29-03

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